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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,113

Applicant(s)

JOACHIM ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-19 and 21-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-19 and 21-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The rejection of claims 1-2, 4-19, and 21-35 under 35 U.S.C. 103(a) as being unpatentable over Bondoc et al, 4,258,098 in view of Steinkopf et al, 6,043,170 is withdrawn in view of applicants arguments.

Claim Objections

Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. More specifically, claim 14 requires that the hydrophilic latex be applied to the mineral wool separately from the size. Claim 1 sets forth applying a size to the mineral wool and applying a hydrophilic latex to the mineral wool, which is applying the hydrophilic latex separately from the size.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, 19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindemann et al, 5,190,997 (Lindemann).

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Lindemann teaches an adhesive composition that comprises a hydrophilic latex that is a dispersion or emulsion of homopolymer or copolymer prepared from one or more monomers having at least one hydrophilic functional group and a thermosetting resin, essentially as claimed in claim 21. See column 5, lines 53 through column 5, line 25, and column 10, line 61. In addition, Lindemann teaches that this composition can be used in the formation of insulation products, as required by claims 15 and 19. See column 10, lines 54-60. As to the language of "prepared by applying a size comprising a thermosetting resin to a mineral wool, applying a hydrophilic latex to the mineral wool, then thermally curing the size" this language sets forth process limitations in a product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Therefore, the prior art teachings of Lindemann anticipate the invention as claimed in claims 15, 19, and 21.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 5-14, 22-27, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann et al, 5,190,997 (Lindemann).

Lindemann teaches a method of improving the strength of glass fiber mats (column 25, lines 35-38) comprising applying an adhesive composition to a glass fiber mat and curing. The adhesive composition is as set forth previously and additionally comprises a homopolymer or copolymer that can be a vinyl polymer or vinyl acetate homopolymer or copolymer, such as polyvinyl acetate or vinylchloride/ethylene copolymer, as required by claims 5-6 and 8. See column 6, lines 21-25. Also, the latex can contain a protective colloid having hydrophilic functional groups such as cellulose or polyvinyl alcohol, as required by claims 7 and 32. See column 11, lines 41-44 and claim 6. The composition can contain a water-repellent agent such as silicone as contemplated by applicants in claims 9 and 22, and the thermosetting resin can be a phenolic resin, as required by claims 26 and 27. See column 10, line 63 and column 11, line 1. The composition has a Tg and solids content within applicants' range as set forth in claims 10-12 and 23-25. See column 11, lines 21-24 and column 24, lines 53-54. While Lindemann teaches mixing the hydrophilic latex and thermosetting resin as required by claim 13, he does not teach applying the latex to the glass fiber mat separately from the thermosetting resin. As to the limitation of applying the thermosetting resin and applying a hydrophilic latex (claim 1), wherein the hydrophilic latex is applied separately from the thermosetting resin (claim 14), it is the position of the examiner that it would have been obvious to modify the teachings of Lindemann by incorporating method steps wherein the latex and thermosetting resin are applied

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separately because the selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results. *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

Therefore, the prior art teachings of Lindemann would have rendered obvious the invention as claimed in claims 1, 5-14, 22-27, and 32.

Claims 2, 16-17, 29-31, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann, et al, 5, 190,997 (Lindemann) as applied to claims 1, 5-15, 19, 21-27, and 32, in view of PCT Publication WO 95/31411 (the publication).

Lindemann is as applied above, but is silent as to the glass fibers being capable of dissolving in a physiological medium. The publication teaches biologically degradable mineral-fibers that can be used for insulation purposes, per claims 2 and 16 and comprises at least one alkali metal oxide in the amounts set forth by applicants in claims 29-31. See pages 2-3. While silent as to the specific rate of dissolution as required by claims 17 and 33-34, it is noted that the fibers of the publication are the same type disclosed by applicants as being suitable. Accordingly, it is the position of the examiner, that this property is inherent in the fibers of the publication. It would have been obvious to use as the fibers of Lindemann, mineral fibers as taught by the publication for the efficacious properties associated therewith, namely, biological degradability, temperature stability and good processibility.

Therefore the combined teachings of Lindemann and PCT Publication WO 95/31411 would have rendered obvious the invention as claimed in present claims 2, 16-17, 29-31, and 33-34.

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Claims 18, 28, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann, et al, 5,190,997 (Lindemann) as applied above to claims 1, 5-15, 19, 21-27, and 32, in view of PCT Publication WO 98/40437 (the publication), cited to show the state of the art.

Lindemann is as set forth above but does not teach the density of his insulation product. The publication is cited to show the general state of the art at the time the invention was made, namely, that it is known in the art that mineral wool densities varied generally between 5 and 200 kg/m³. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce an insulation product of the type set forth by applicants wherein the density of said product is within the range generally known in the art and as set forth by applicants in claims 18, 28, and 35. Moreover, this limitation is not construed to be a matter of invention in the absence of factual evidence to the contrary.

Therefore, the teachings of Lindemann in combination with the general level of ordinary skill and knowledge in the art as evidenced by the publication would have rendered obvious the invention claimed in present claims 18, 28 and 35.

Response to Arguments

Applicant's arguments with respect to claims 1, 5-19, and 21-35 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Conclusion

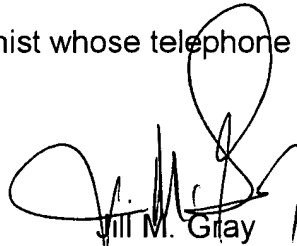
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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.



Jill M. Gray
Examiner
Art Unit 1774

jmg